The Fundamentals and Benefits of CI/CD

Overview

▶ Continuous Integration

The practice of merging all developers' working copies to a shared mainline several times a day.

▶ Continuous Deployment

A software engineering approach in which the value is delivered frequently through automated deployments.

Benefits of CI/CD

▶ Less bugs in production and less time in testing

▶ Less human error, Faster deployments

▶ Less infrastructure costs from unused resources

▶ Less time to market and provide new features quickly to users

▶ Quick undo to return production to working state as we can find problems faster

- Less developer time on issues from new developer code as every developer's code must run well before merging it to our product

- Reduced downtime from a deploy-related crash or major bug